AMENDMENT UNDER 37 C.F.R. § 1.114(c) Attorney Docket No.: Q79792

Application No.: 10/779,788

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): A planographic printing plate precursor, comprising:

a substrate;

a photosensitive layer comprising an IR absorber, a polymerization initiator, a

polymerizable compound and a binder polymer; and

a protective layer containing a UV absorber,

disposed in this order,

wherein the photosensitive layer exhibits reduction in solubility in an alkaline developing

solution upon being exposed to light having a wavelength of 750 nm to 1400 nm;

the photosensitive layer further comprises a compound containing at least one carboxylic

group and having a weight-average molecular weight of 3000 or less; and

the compound containing at least one carboxylic group is one selected from the group

consisting of a phthalic acid derivative, a trimellitic acid derivative, a pyromellitic acid

derivative, a succinic acid derivative, a benzoic acid derivative and a glycine derivative; and

the UV absorber is represented by the following Formula [1-a], [1-b], [1-c] or [1-d]:

Formula [1-a]

2

Attorney Docket No.: Q79792

AMENDMENT UNDER 37 C.F.R. § 1.114(c) Application No.: 10/779,788

wherein in Formula [1-a], R^{1a} is an atomic group represented by -OX or -N(X)(Y), wherein X and Y each represent a hydrogen atom, alkyl group, cyanoalkyl group, carboxyalkyl group, sulfoalkyl group, hydroxylalkyl group, halogenated alkyl group or optionally substituted alkyl group, or a sodium or potassium salt thereof; R^{2a} and R^{3a} each represent a hydrogen atom, halogen atom, alkyl group, hydroxyl group, alkoxy group, alkylthio group, or the same group as the above-mentioned -OX group; Q represents a phenyl group, sulfoalkyl group, sulfoalkyl group, sulfoalkyl group, or sodium or potassium salt thereof; L represents an optionally substituted methine group; R^{4a} represents an alkyl group, carboxy group, alkyloxycarbonyl group, or acyl-substituted or unsubstituted amino group; m is 1 or 2; and n is 0 or 1;

Formula [1-b]

AMENDMENT UNDER 37 C.F.R. § 1.114(c) Attorney Docket No.: Q79792

Application No.: 10/779,788

in formula [1-b], R^{1b}, R^{2b}, R^{3b}, R^{4b} and R^{5b} each represent a hydrogen atom, halogen atom, alkyl group, hydroxyl group, alkoxy group, amino group, acylamino group, carboxyl group or sulfone group, or a sodium or potassium salt thereof; and R represents an alkyl group or carboxyl group;

Formula [1-c]

in formula [1-c], R^{1c} and R^{2c} each represent an alkyl group, substituted alkyl group, aryl group, alkoxycarbonyl group or carboxyl group; R^{3c} and R^{4c} each represent a sulfonic acid group, an alkyl or sulfonic acid group substituted with a carboxyl group, an aryl group substituted with a carboxyl group or sulfonic acid group, or a sodium or potassium salt thereof; L represents a substituted or unsubstituted methine chain; M represents sodium, potassium or a hydrogen atom; and l is 0 or 1;

Formula [1-d]

Application No.: 10/779,788

in formula [1-d], R^{1d}, R^{2d} R^{3d} and R^{4d} each represent an alkyl group, hydroxyalkyl group, cyano group, alkylcyano group, alkoxy group or sulfoalkyl group; and R^{5d} and R^{6d} each represent a sulfonic acid group and alkylsulfonic acid group.

- 2. (original): The planographic printing plate precursor of claim 1, wherein the UV absorber has a maximum absorption at a wavelength in a range of 300 to 420 nm.
 - 3. (canceled).
 - 4. (canceled).
- 5. (original): The planographic printing plate precursor of claim 1, wherein a developing rate of an unexposed portion of the photosensitive layer by an alkaline developing solution having a pH of 10 to 13.5 is 80 nm/sec or more, and a permeation rate of the alkaline developing solution to an exposed portion of the photosensitive layer is 100 nF/sec or less.
- 6. (original): The planographic printing plate precursor of claim 1, wherein the IR absorber is one selected from the group consisting of a cyanine dye, a squarylium dye, a pyrylium salt, a nickel/thiolate complex and an indolenine cyanine dye.
- 7. (original): The planographic printing plate precursor of claim 1, wherein the IR absorber is a pigment having a particle diameter of 0.01 to 10 μ m.
- 8. (original): The planographic printing plate precursor of claim 1, wherein an absorbance of the photosensitive layer at a maximum absorption wavelength in a range of 760 to 1200 nm is 0.5 to 1.2 measured by a reflection measurement method.

AMENDMENT UNDER 37 C.F.R. § 1.114(c) Attorney Docket No.: Q79792

Application No.: 10/779,788

9. (original): The planographic printing plate precursor of claim 1, wherein the polymerization initiator is a radical-generating agent which is decomposed by heat to generate radicals.

- 10. (original): The planographic printing plate precursor of claim 9, wherein the radical-generating agent is an onium salt.
- 11. (original): The planographic printing plate precursor of claim 1, wherein the polymerization initiator is contained in the photosensitive layer in an amount of 0.1 to 50% by mass based on a total solid content of the photosensitive layer.
- 12. (previously presented): The planographic printing plate precursor of claim 1, wherein an acid value (meg/g) of the binder polymer is in a range of 2.00 to 3.60.
- 13. (original): The planographic printing plate precursor of claim 1, wherein the binder polymer has a radical-polymerizable group.
- 14. (original): The planographic printing plate precursor of claim 1, wherein the binder polymer has an alkali-soluble group.
- 15. (original): The planographic printing plate precursor of claim 1, wherein the binder polymer has a weight-average molecular weight of 2,000 to 1,000,000.
- 16. (original): The planographic printing plate precursor of claim 1, wherein the binder polymer has a glass transition point (Tg) of 70 to 300°C.
- 17. (original): The planographic printing plate precursor of claim 1, wherein the binder polymer comprises a repeating unit represented by the following formula (I):

AMENDMENT UNDER 37 C.F.R. § 1.114(c) . Attorney Docket No.: Q79792

Application No.: 10/779,788

wherein R¹ represents a hydrogen atom or a methyl group; R² represents a linking group composed of atoms selected from carbon atoms, hydrogen atoms, oxygen atoms, nitrogen atoms, sulfur atoms and halogen atoms, wherein a number of atoms excluding atoms in a substituent group is 2 to 30; A represents an oxygen atom or -NR³- wherein R³ represents a hydrogen atom or a monovalent hydrocarbon group having 1 to 10 carbon atoms; and n is an integer from 1 to 5.

- 18. (canceled).
- 19. (original): The planographic printing plate precursor of claim 1, further comprising an intermediate layer between the photosensitive layer and the substrate.
- 20. (previously presented): The planographic printing plate precursor of claim 1, wherein the compound containing at least one carboxylic group is one selected from the group consisting of a phthalic acid derivative, a trimellitic acid derivative, a pyromellitic acid derivative, and a succinic acid derivative.